STIC Search Report
EIC 3700

STIC Database Tracking Number: 116596

TO: Roderick Bradford
Location: cp2 3a11
Art Unit: 3762

Case Serial Number: 10/023761

From: Jeanne Horrigan
Location: EIC 3700
CP2-2C08
Phone: 305-5934

jeanne.horrigan@uspto.gov

Search Notes

Attached are the search results for the method and device for diagnosis and therapy of heart failure, including prior art searches in foreign and international patent databases; medical device and general sci/tech non-patent literature databases; and the Web via the Google search engine.

Also attached is a search feedback form. Completion of the form is voluntary. Your completing this form would help us improve our search services.

I hope the attached information is useful. Please feel free to contact me (phone 305-5934 or email jeanne.horrigan@uspto.gov) if you have any questions or need additional searching on this application.

JH

Access DB# 116596

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Roderick Bradford Examiner #: 79013 Date: 3/10/04
Art Unit: 3762 Phone Number 30 5-3287 Serial Number: 10/023761
Mail Box and Bldg/Room Location: 3/A11 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.
****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Method + device for the diagnosis + therepy of chronic heart failur.

Inventors (please provide full names): Bombardini, Tonino

Earliest Priority Filing Date: 12/21/00

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

File 155:MEDLINE(R) 1966-2004/Mar W1

Set	Items	Description
S1	47838	R1:R6
S2	6378	CHRONIC(2N)(HEART OR CARDIAC OR CORONARY)()FAILURE
S3	659	S1(L)DI AND S1(L)TH
S4	66	S2 AND S3
S5	281073	MONITOR?
S6	3774	DECOMPENSATION
S7	**1**	**S4 AND S6**
S8	4	S4 AND S5
S9	0	S7 AND S8
S10	**4**	**S8**
S11	39	S3 AND S5
S12	0	S11 AND S6
S13	12	S3 AND S6
S14	102431	S5/TI,DE
S15	20	S11 AND S14
S16	5	S15/2001:2004
S17	**15**	**S15 NOT S16**

7/7,K/1

DIALOG(R)File 155:MEDLINE(R)

08756791 PMID: 2267563

[Usefulness of exercise tests in the evaluation of the effects of treatment in chronic cardiac insufficiency]

Utilite des epreuves d'effort dans l'evaluation des effets du traitement dans l'insuffisance cardiaque chronique.

Zannad F
Pharmacologie clinique et cardiologie, hopital Central, CHRU de Nancy.

La Revue du praticien (FRANCE) Oct 11 1990, 40 (23 Suppl) p31-5, ISSN 0035-2640 Journal Code: 0404334
Document type: Journal Article ; English Abstract
Languages: FRENCH
Main Citation Owner: NLM
Record type: Completed

Before it reaches the **decompensation** stage, heart failure is characterized by symptoms which occur only during exercise. It is therefore rational to believe that the effectiveness of treatments of heart failure should be evaluated by the improvement they produce in tolerance to stress. This tolerance can be evaluated by exercise tests which may take different forms. The most common is a progressive load test on bicycle ergometer or treadmill. Among the indices used to assess tolerance to stress, the total duration of the exercise test until symptoms develop is a variable subject to fluctuations which may be independent of the patient's cardiovascular state. Measurement of oxygen consumption at peak exercise level is usually preferred, being unrelated to the nature of the stress and much more reproducible and sensitive to changes. Among the pharmacological treatments of **heart failure** , only **chronic** vasodilator therapy, notably with angiotensin-converting enzyme inhibitors, has proved constantly effective on the various ergometric indices. In the literature, the effects of digitalis compounds, dihydralazine and alpha-blockers are inconstant. Among the new treatments of heart failure, phosphodiesterase inhibitors may improve tolerance to stress, as does Corwin which may prolong the total duration of exercise. Its effect on oxygen consumption has not yet been evaluated. Performance at exercise is almost never improved by acute

treatment with any pharmacological agent, and the same remarks applies to short-term heart transplantation. The reason for this is that **heart failure** is associated with a physical deconditioning syndrome due to abnormalities of the arterial dilatation capacity in skeletal muscles, and with muscular metabolic abnormalities due to a defective oxygen utilization by these muscles. (ABSTRACT TRUNCATED AT 250 WORDS)
Record Date Created: 19910214
Record Date Completed: 19910214

10/6/1
14524238 PMID: 10524733
A case of progressive congestive heart failure secondary to severe anemia in a patient presenting with uterine hemorrhage.
Sep 1999

10/6/2
14017804 PMID: 9717010
Systemic inflammation in patients with heart failure.
May 1998

10/6/3
12366409 PMID: 12707230
Transendocardial, autologous bone marrow cell transplantation for severe, chronic **ischemic** heart failure .
May 13 2003

17/6/3
11694091 PMID: 11868592
Optimizing oxygen delivery: haemodynamic workshop. Part 3.
Apr 2000

17/6/14
03303719 PMID: 4258883
The critically ill child: care of the infant in cardiac failure.
Jun 1971

17/6/15
02693616 PMID: 5790397
Heart failure in the newborn infant. Recognition and management.
Jul 1969

17/7/7
DIALOG(R)File 155:MEDLINE(R)

09445133 PMID: 10149863
Ancillary diagnostic and therapeutic issues in cardiac failure.
Cleland J G
Hammersmith Hospital, London, UK.
Current opinion in cardiology (ENGLAND) Jun 1992, 7 (3) p408-15,
ISSN 0268-4705 Journal Code: 8608087
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
A truly important advance in medical science must have practical implications for the patient, eg, rendering **diagnosis** faster, safer, less

distressing, or more accurate. Improvements in noninvasive techniques for hemodynamic **monitoring** constitute such progress. In other areas of cardiology, such as managing arrhythmias and preventing sudden death in **heart failure**, little progress is apparent. However, recent studies have at least identified some **treatments** that are either ineffective or harmful. Finally, alternative solutions, no matter how improbable, should be explored when a problem seems insoluble. Despite the fact that many would like scientific progress to be a series of logical steps, most medical advances are serendipitous or reinventive. (82 Refs.)
Record Date Created: 19920827
Record Date Completed: 19920827

17/7/9
DIALOG(R)File 155:MEDLINE(R)

08039144 PMID: 2645759
Congestive heart failure--advances in treatment. Hemodynamic studies--their uses and limitations.
Chatterjee K
Department of Medicine, School of Medicine, University of California, San Francisco 94143.
American journal of cardiology (UNITED STATES) Feb 21 1989, 63 (8) p3D-7D, ISSN 0002-9149 Journal Code: 0207277
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Hemodynamic studies are useful in the **diagnosis** of the pathophysiologic mechanisms of pump failure and low output state in patients with acute **heart failure**. Hemodynamic **monitoring** is extremely useful for the appropriate manipulation of the vasoactive drugs to optimize hemodynamic and clinical improvement of patients with acute **heart failure** and to stabilize patients with severe refractory or unstable chronic **heart failure**. Determinations of the hemodynamic indexes of left ventricular function during hemodynamic studies also provide information regarding prognosis of patients with acute or chronic **heart failure**. In patients with stable chronic **heart failure**, correlations between the changes in hemodynamics after initiation of vasodilator therapy and subsequent changes in the clinical status and exercise tolerance are poor; thus, the value of hemodynamic studies for vasodilator therapy in patients with stable chronic **heart failure** is limited. (25 Refs.)
Record Date Created: 19890403
Record Date Completed: 19890403

17/7/11
DIALOG(R)File 155:MEDLINE(R)

07155829 PMID: 2872998
Congestive heart failure.
Srebro J; Karliner J S
Current problems in cardiology (UNITED STATES) Jun 1986, 11 (6) p301-65, ISSN 0146-2806 Journal Code: 7701802
Document type: Journal Article; Review
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

(129 Refs.)
Record Date Created: 19860818
Record Date Completed: 19860818

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200416
File 347:JAPIO Nov 1976-2003/Nov(Updated 040308)
File 371:French Patents 1961-2002/BOPI 200209
Set Items Description
S1 2 AU='BOMBARDINI T'

1/26,TI/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 THOMSON DERWENT. All rts. reserv.
013279979
WPI Acc No: 2000-451914/200039
Multilumen catheter for performing intramyocardiac treatment, has dual lumen system to separately release diagnostic tracer and therapeutic fluids

1/7/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 THOMSON DERWENT. All rts. reserv.
014688019 **Image available**
WPI Acc No: 2002-508723/200254
Chronic heart failure diagnosis and therapy method involves determining and comparing decompensation parameters during normal life period and therapy period
Patent Assignee: BOMBARDINI T (BOMB-I)
Inventor: **BOMBARDINI T**
Number of Countries: 100 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200249510	A1	20020627	WO 2001EP14196	A	20011128	200254	B
US 20020091332	A1	20020711	US 200123761	A	20011221	200254	
AU 200224914	A	20020701	AU 200224914	A	20011128	200264	
EP 1343415	A1	20030917	EP 2001994762	A	20011128	200362	
			WO 2001EP14196	A	20011128		
IT 1318370	B	20030825	IT 2000RE134	A	20001221	200372	

Priority Applications (No Type Date): IT 2000RE134 A 20001221
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200249510	A1	E	29	A61B-005/02	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZM ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020091332	A1		A61B-005/04	
AU 200224914	A		A61B-005/02	Based on patent WO 200249510
EP 1343415	A1	E	A61B-005/02	Based on patent WO 200249510

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

IT 1318370	B		A61B-000/00

Abstract (Basic): WO 200249510 A1

NOVELTY - A patient is monitored and decompensation parameters are continuously determined for normal life period and therapy period. The decompensation parameters during normal period are compared with that obtained during the therapy period. Decompensation presence and absence period are obtained from comparison result of parameters, and are compared with total sample period.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for diagnostic apparatus.

USE - For diagnosing and treating chronic heart failure of patient.

ADVANTAGE - By dividing the abnormality region of the force-frequency relationship into sub-regions corresponding to therapeutic regimes and the selective activation of the therapeutic regimes, minimizes non-essential energy consumption and diagnostic activity, and hence conserves the life of the energy source. Monitoring the patient's condition not only enables the verification of the patient's condition, but also enables to determine the effectiveness of therapies and their influence on the patient's condition in normal stage.

DESCRIPTION OF DRAWING(S) - The figure shows a curve between ventricular force and heart rate during normal condition of patient.

pp; 29 DwgNo 1/6

Derwent Class: P31; S02; S05

International Patent Class (Main): A61B-000/00; A61B-005/02; A61B-005/04

File 348:EUROPEAN PATENTS 1978-2004/Mar W01
File 349:PCT FULLTEXT 1979-2002/UB=20040304,UT=20040226
Set Items Description
S1 4 AU='BOMBARDINI':AU='BOMBARDINI TONINO'[2 duplicates; 2 not relevant]

1/6/2 (Item 2 from file: 348)
01180000
CATHETER SYSTEM FOR PERFORMING INTRAMYOCARDIAC THERAPEUTIC TREATMENT

1/6/4 (Item 2 from file: 349)
00572158 **Image available**
CATHETER SYSTEM FOR PERFORMING INTRAMYOCARDIAC THERAPEUTIC TREATMENT

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File 476:Financial Times Fulltext 1982-2004/Mar 12
File 477:Irish Times 1999-2004/Mar 08
File 710:Times/Sun.Times(London) Jun 1988-2004/Mar 11
File 711:Independent(London) Sep 1988-2004/Mar 12
File 756:Daily/Sunday Telegraph 2000-2004/Mar 11
File 757:Mirror Publications/Independent Newspapers 2000-2004/Feb 26
Set     Items   Description
S1          0   TONINO()BOMBARDINI
S2          8   BOMBARDINI
S3          8   RD (unique items) [not relevant]

File 155:MEDLINE(R)  1966-2004/Mar W1
File   5:Biosis Previews(R)  1969-2004/Mar W1
File  73:EMBASE  1974-2004/Mar W1
File  34:SciSearch(R) Cited Ref Sci  1990-2004/Mar W1
File 434:SciSearch(R) Cited Ref Sci  1974-1989/Dec
Set     Items   Description
S1         94   AU='BOMBARDINI':AU='BOMBARDINI TONINO'
S2    1719776   CHRONIC
S3          3   S1 AND S2
S4          3   RD (unique items)
S5     168748   R1:R50
S6          0   S1 AND S5
S7     290924   (HEART OR CARDIAC OR MYOCARDIAL)()(FAILURE OR INSUFFICIENC-
              Y) OR CONGESTIVE()HEART()DISEASE OR CHF OR CHD
S8       5225   CORONARY()(FAILURE OR INSUFFICIENCY)
S9          1   S1 AND S7:S8
S10         1   S9 NOT S3

 4/6/1     (Item 1 from file: 5)
0006255175   BIOSIS NO.: 198886095096
MYOCARDIAL SCINTIGRAPHY WITH TECHNETIUM-99M IN THE EVALUATION OF THE
HEMODYNAMIC EFFECTS AFTER ORAL PROPAFENON ADMINISTRATION IN RECENT ACUTE
MYOCARDIAL INFARCTION
1988

 4/6/2     (Item 1 from file: 34)
11750933   Genuine Article#: 689UC   Number of References: 40
Title: Force-frequency relationship in the echocardiography laboratory: A
    noninvasive assessment of Bowditch Treppe?  (ABSTRACT AVAILABLE)
Publication date: 20030600

 4/6/3     (Item 2 from file: 34)
04684218   Genuine Article#: UA674   Number of References: 28
Title: EFFECT OF NORMOVOLEMIC HEMODILUTION ON FATAL POSTOPERATIVE
PULMONARY-EMBOLISM IN MAJOR ELECTIVE ORTHOPEDIC-SURGERY - A RETROSPECTIVE
ANALYSIS ON 4653 PATIENTS  (Abstract Available)

 10/6/1     (Item 1 from file: 5)
0014272245   BIOSIS NO.: 200300229045
Endocardial acceleration based implantable system for monitoring acute
  ventricular failure.
2002
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File 155:MEDLINE(R) 1966-2004/Mar W1
File   5:Biosis Previews(R) 1969-2004/Mar W1
File  73:EMBASE 1974-2004/Mar W1
File  34:SciSearch(R) Cited Ref Sci 1990-2004/Mar W1
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
File 144:Pascal 1973-2004/Mar W1
File   2:INSPEC 1969-2004/Mar W1
File   6:NTIS 1964-2004/Mar W1
File   8:Ei Compendex(R) 1970-2004/Mar W1
File  94:JICST-EPlus 1985-2004/Mar W1
File  95:TEME-Technology & Management 1989-2004/Feb W4
File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Feb
File  65:Inside Conferences 1993-2004/Mar W2
File  35:Dissertation Abs Online 1861-2004/Feb
Set     Items   Description
S1     324718   (HEART OR CARDIAC OR MYOCARDIAL OR CORONARY)()(FAILURE? ? -
             OR INSUFFICIENCY OR DECOMPENSATION) OR CONGESTIVE()HEART()(DI-
             SEASE OR FAILURE) OR CHF
S2     444734   HEART()(RATE OR RATES)
S3       1640   VENTRICULAR()CONTRACTILE()FORCE? ? OR FORCE? ? (3N)(VENTRI-
             CLE OR VENTRICULAR)(2N)CONTRACT????
S4    4660384   NORMAL OR ROUTINE
S5    7780415   THERAP?
S6      24562   DECOMPENSAT?
S7    2475509   MONITOR? OR TRACK???
S8    7002128   DIAGNOS?
S9         82   S1 AND S2 AND S3
S10        16   S4 AND S9
S11         9   S5 AND S10
S12         6   RD (unique items)
S13         0   S12/2001:2004
S14         7   S10 NOT S11
S15         7   RD (unique items)
S16         1   S15/2001:2004
S17         6   S15 NOT S16
S18      3191   FORCE()FREQUENCY
S19       180   S1 AND S2 AND S18
S20         9   (S9 OR S19) AND S7
S21         7   S20 NOT  S10:S11
S22         4   RD (unique items)
S23         8   S7(2N)S6 AND S1/TI,DE
S24         8   S23 NOT (S10 OR S11 OR S20)
S25         5   RD (unique items)
S26     26184   S5 AND S8 AND S1
S27      5311   S5(10N)S8(10N)S1
S28        58   S27/TI AND S27/DE
S29         5   S6 AND S28
S30         5   S29 NOT (S10 OR S11 OR S20 OR S23)
S31         3   RD (unique items)[too recent]
S32        53   S28 NOT (S10 OR S11 OR S20 OR S23 OR S30)
S33        46   RD (unique items)
S34        11   S33/2001:2004
S35        35   S33 NOT S34
S36        35   Sort S35/ALL/PY,A

12/6/1      (Item 1 from file: 155)
```

09619872 PMID: 1363262
Importance of beta 2-adrenergic receptors in heart failure]
Bedeutung von beta 2-Adrenozeptoren bei Herzinsuffizienz.
1992

12/6/2 (Item 2 from file: 155)
06414496 PMID: 11527117
The role of cardiac beta1- and beta2-adrenoceptor stimulation in heart failure .
1990

12/6/3 (Item 1 from file: 5)
0012140845 BIOSIS NO.: 199900400505
Effects of levosimendan on cardiac arrhythmia: Electrophysiologic and ambulatory electrocardiographic findings in phase II and phase III clinical studies in cardiac failure
1999

12/6/4 (Item 1 from file: 73)
05710519 EMBASE No: 1994114284
Positive inotropic effects of the betainf 2-adrenoceptor agonist terbutaline in the human heart: Effects of long-term betainf 1-adrenoceptor antagonist treatment
1994

12/6/5 (Item 2 from file: 73)
05266544 EMBASE No: 1993034629
Role of cardiac betainf 2-adrenoceptors in chronic heart insufficiency
BEDEUTUNG VON betainf 2-ADRENOZEPTOREN BEI HERZINSUFFIZIENZ
1992

12/6/6 (Item 1 from file: 34)
02181725 Genuine Article#: KG376 Number of References: 57
Title: ROLE OF CARDIAC BETA-2-ADRENOCEPTORS IN CHRONIC HEART INSUFFICIENCY (Abstract Available)

17/6/1 (Item 1 from file: 73)
05875706 EMBASE No: 1994288662
Angiotensin-converting enzyme inhibition prolongs survival and modifies the transition to heart failure **in rats with pressure overload hypertrophy due to ascending aortic stenosis**
1994

17/6/3 (Item 3 from file: 73)
05262637 EMBASE No: 1993030722
Force-frequency relations and response to ryanodine in failing rabbit hearts
1992

17/6/5 (Item 5 from file: 73)
02304204 EMBASE No: 1983235365
Cardiotonic activity of milrinone, a new and potent cardiac bipyridine, on the normal **and failing heart of experimental animals**
1983

17/6/6 (Item 1 from file: 34)

02511096 Genuine Article#: LG741 Number of References: 41
Title: CARDIOVASCULAR EFFECTS OF NSP-804 AND NSP-805, NOVEL CARDIOTONIC AGENTS WITH VASODILATOR PROPERTIES (Abstract Available)

17/7,K/2 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

05704094 EMBASE No: 1994121661
Influence of the force-frequency relationship on haemodynamics and left ventricular function in patients with non-failing hearts and in patients with dilated cardiomyopathy
Hasenfuss G.; Holubarsch C.; Hermann H.-P.; Astheimer K.; Pieske B.; Just H.
Medizinische Klinik III, Universitat Freiburg, Hugstetter Strasse 55,79106 Freiburg Germany
European Heart Journal (EUR. HEART J.) (United Kingdom) 1994, 15/2 (164-170)
CODEN: EHJOD ISSN: 0195-668X
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
In isolated human myocardium it was shown that a positive **force-frequency** relationship occurs in non-failing myocardium; however, the **force-frequency** relationship was found to be inverse in myocardium from **failing** human **hearts**. In order to investigate the clinical relevance of these experimental findings the influence of **heart rate** changes on haemodynamics and left **ventricular** function was studied in eight patients without **heart failure** and in nine with failing dilated cardiomyopathy (NYHA II-III). Right ventricular pacing was performed at a rate slightly above sinus rate and at 100, 120 and 140 beats. minsup -sup 1. Haemodynamic parameters were obtained by right heart catheterization and by high-fidelity left ventricular pressure measurements. Left ventricular angiography was perforomed at basal pacing rate and at 100, and 140 beats minsup -sup 1. With increasing **heart rate** cardiac index increased in patients with **normal** left ventricular function from 2.9 +/- 0.2 to 3.5 +/- 0.21.minsup -sup 1.msup -sup 2(P<0.01) and decreased continuously in patients with dilated cardiomyopathy from 2.6 +/- 0.1 to 2.2 +/- 0.11. minsup -sup 1.msup -sup 2(P<0.05). With increasing **heart rate** the maximum rate of left ventricular pressure rise increased in non-failing hearts from 1388 +/- 86 to 1671 +/- 88 mmHg. ssup -sup 1 (P < 0. 01) and did not change in failing hearts. Ejection fraction decreased from 27 +/- 3% to 19 +/- 2% in patients with dilated cardiomyopathy (P < 0.05) when the pacing rate was changed from 84 +/- 2 beats minsup -sup 1 to 140 beats. minsup -sup 1, which was associated with a significant increase in end-systolic volume without significant changes in end-diastolic volume. In patients with **normal** left ventricular function when the pacing rate was changed from 85 +/- 3 beats. minsup -sup 1, to 140 beats. minsup -sup 1 end-diastohc volume decreased significantly by 13% whereas left ventricular end-systolic volume and ejection fraction did not significantly change. Left ventricular systolic and end-diastolic pressures did not significantly change with pacing tachycardia in either group. The frequency-related changes in left ventricular volumes and pressures indicate that the different haemodynamic effects of pacing tachycardia in both groups of patients result predominantly from frequency effects on myocardial function and not from frequency effects on preload or afterload. These data indicate that recent experimental findings of positive force-frequency effects in non-failing and negative force-frequency effects in failing human myocardium are relevant for the intact heart.

MEDICAL DESCRIPTORS:
*congestive cardiomyopathy; *heart hemodynamics; *heart left **ventricle** function; *heart muscle **contractile force**
...angiocardiography; article; clinical article; controlled study; diastole ; female; heart afterload; heart catheterization; heart ejection fraction; **heart failure** ; heart index; heart left ventricle pressure; heart preload ; **heart rate** ; heart ventricle pacing; hemodynamic parameters; human; male; priority journal; systole

22/6/1 (Item 1 from file: 155)
04451467 PMID: 835465
A depressed response of left ventricular contractile force **to isoproterenol and norepinephrine in dogs with** congestive heart failure.
Feb 1977

22/6/3 (Item 2 from file: 73)
06943864 EMBASE No: 1997228379
Effect of milrinone and atrial pacing on stunned myocardium
1997

22/6/4 (Item 1 from file: 34)
06985320 Genuine Article#: 111WF Number of References: 35
Title: Effect of dopamine and atrial pacing on stunned myocardium (
Publication date: 19980600

25/6/3 (Item 1 from file: 5)
0008034075 BIOSIS NO.: 199243002666
PERIPHERAL PULMONARY ARTERY STENOSIS IN PREGNANCY A REPORT OF TWO CASES
1992

25/6/5 (Item 2 from file: 73)
03693470 EMBASE No: 1988142906
Hypermetabolic response after hypothermic cardiopulmonary bypass
1987

36/6/1 (Item 1 from file: 155)
02553669 PMID: 5748974
Creatine phosphokinase activity in myocardial infarction, heart failure , **and following various** diagnostic **and** therapeutic **procedures.**
Dec 1968

36/6/2 (Item 2 from file: 155)
02848749 PMID: 5373354
Diagnosis **and** therapy **of** cardiac insufficiency]
Diagnostika i terapiia serdechnoi nedostatochnosti.
Aug 1969

36/6/4 (Item 4 from file: 155)
02886288 PMID: 5444236
Differential diagnosis **of** therapy **resistant** heart insufficiency]
Zur Differentialdiagnose der therapierefraktaren Herzinsuffizienz.
Mar 21 1970

36/6/5 (Item 5 from file: 155)
03476163 PMID: 4642477
Differential diagnosis **and** therapy **of digitalis-refractory** heart

failure]
Zur Differentialdiagnose und Therapie der digitalisrefraktaren Herzinsuffizienz.
Sep 1972

36/6/6 (Item 6 from file: 155)
03988154 PMID: 4477108
Proceedings: Diagnosis **and** therapy **of cardiogenic shock and** cardiac insufficiency **caused by acute myocardial infarct]**
Oct 1974

36/6/7 (Item 7 from file: 155)
05951434 PMID: 6126964
Current problems in the diagnosis **and** therapy **of** cardiac insufficiency]
Aktuelle Fragen zur Diagnostik und Therapie der Herzinsuffizienz.
Jun 1 1982

36/6/8 (Item 8 from file: 155)
06286295 PMID: 6636560
Cardiac insufficiency. **Pathophysiology, invasive** diagnosis **and** therapy]
Srdecni nedostatecnost. Patofysiologie, invasivni diagnostika a lecba.
Aug 1983

36/6/9 (Item 9 from file: 155)
06175696 PMID: 6865721
Current views of diagnosis **and long-term** therapy **of** heart insufficiency]
Aktuelle Gesichtspunkte der Diagnostik und Langzeittherapie der Herzinsuffizienz.
Apr 22 1983

36/6/10 (Item 10 from file: 155)
07916831 PMID: 3178368
Heart failure **with normal systolic function. Update of prevalence, differential** diagnosis , **prognosis, and** therapy .
Oct 1988

36/6/11 (Item 11 from file: 155)
08625780 PMID: 2385954
[Diagnosis and therapy of ventricular tachycardia in heart failure]
Diagnostik und Therapie der ventrikularen Tachykardie bei Herzinsuffizienz.
Jun 15 1990

36/6/13 (Item 13 from file: 73)
05018790 EMBASE No: 1992159006
Ancillary diagnostic and therapeutic issues in cardiac failure
1992

36/6/14 (Item 14 from file: 155)
09446584 PMID: 1389305
Heart failure **in the elderly (from** diagnosis **to** therapy)]
A insuficiencia cardiaca no idoso (do diagnostico a terapeutica).
Jul-Aug 1992

36/6/15 (Item 15 from file: 155)

09339935 PMID: 1609544
[Diastolic left ventricular dysfunction--significance for differential diagnosis and therapy of heart failure in the aged]
Diastolische linksventrikulare Dysfunktion--Bedeutung fur die Differentialdiagnostik und -therapie der Herzinsuffizienz im Alter.
Mar-Apr 1992

36/6/16 (Item 16 from file: 73)
05879402 EMBASE No: 1994289480
Congestive heart failure **in Norwegian hospitals. Prevalence,** diagnostic **and** therapeutic **aspects**
HJERTESVIKT I NORSKE SYKEHUSAVDELINGER. PREVALENS, DIAGNOSTISKE OG TERAPEUTISKE ASPEKTER
1994

36/6/18 (Item 18 from file: 73)
05630935 EMBASE No: 1994029949
Chronic heart failure. Diagnosis and therapy
CHRONISCHE HERZINSUFFIZIENZ. DIAGNOSTIK UND THERAPIE
1994

36/6/19 (Item 19 from file: 155)
10238076 PMID: 7940446
Heart failure **in Norwegian hospital departments. Prevalence,** diagnostic **and** therapeutic **aspects]**
Hjertesvikt i norske sykehusavdelinger. Prevalens, diagnostiske og terapeutiske aspekter.
Sep 10 1994

36/6/20 (Item 20 from file: 155)
10190460 PMID: 8076735
Aspects of diagnostic **and** therapeutic **problems of chronic** heart failure **. Part 1]**
Aspetti problematici nella diagnosi e nella cura dello scompenso cardiaco cronico. 1a parte.
May 1994

36/6/21 (Item 21 from file: 155)
12594094 PMID: 7707781
[Diastolic dysfunction in heart failure. Further studies on diagnosis and therapy are necessary]
Diastolisk dysfunktion vid hjartsvikt. Fler studier kravs kring diagnos och terapi.
Mar 29 1995

36/6/22 (Item 22 from file: 73)
06386770 EMBASE No: 1996037083
Diastolic heart insufficiency. Pathophysiology, diagnostics and therapy
DIASTOLISCHE HERZINSUFFIZIENZ. PATHOPHYSIOLOGIE, DIAGNOSTIK UND THERAPIE
1996

36/6/23 (Item 23 from file: 155)
13169924 PMID: 8839198
[Diastolic heart failure. Pathophysiology, diagnosis and therapy]
Diastolische Herzinsuffizienz. Pathophysiologie, Diagnostik und Therapie.
Jan 15 1996

36/6/24 (Item 24 from file: 73)
06969175 EMBASE No: 1997253774
Diagnosis **and** therapy **of** heart failure : **Etiologic clarification permits adequate** therapy
DIAGNOSE UND THERAPIE DER HERZINSUFFIZIENZ: ATIOLOGISCHE ABKLARUNG ERLAUBT ADAQUATE THERAPIE
1997

36/6/25 (Item 25 from file: 73)
07423428 EMBASE No: 1998331660
Cardiac failure in the human foetus: Diagnosis and therapy
HERZINSUFFIZIENZ IN UTERO: DIAGNOSE UND THERAPIE
26 SEP 1998

36/6/26 (Item 26 from file: 155)
14181747 PMID: 9884016
Heart failure: **a** diagnostic **and** therapeutic **dilemma in elderly patients.**
Jul 1998

36/6/27 (Item 27 from file: 155)
14095935 PMID: 9793162
Heart failure **in utero:** diagnosis **and** therapy]
Herzinsuffizienz in utero: Diagnose und Therapie.
Sep 26 1998

36/6/28 (Item 28 from file: 155)
14094638 PMID: 9792024
[Heart failure: diagnosis and therapy]
Herzinsuffizienz: Diagnostik und Therapie.
Sep 15 1998

36/6/29 (Item 29 from file: 73)
07838551 EMBASE No: 1999072763
Systolic dysfunction of the ventricle in congestive heart failure : **Pathophysiology,** diagnosis , **and** therapy
1999

36/6/30 (Item 30 from file: 73)
07791903 EMBASE No: 1999275043
Diastolic heart failure: Incidence, diagnosis, therapy
DIE DIASTOLISCHE HERZINSUFFIZIENZ: INZIDENZ, DIAGNOSTIK, THERAPIE
1999

36/6/31 (Item 31 from file: 155)
14520599 PMID: 10519161
The natriuretic peptides in heart failure : diagnostic **and** therapeutic **potentials.**
Sep-Oct 1999

36/6/32 (Item 32 from file: 155)
14391270 PMID: 10475879
Heart failure: **a** diagnostic **and** therapeutic **dilemma in elderly patients.**
May 1999

36/6/33 (Item 33 from file: 155)

10866739 PMID: 10998818
The diagnostic **and** therapeutic **approach to the patient in acute** congestive heart failure .
May 2000

36/6/34 (Item 34 from file: 155)
10749412 PMID: 10870379
Heart failure **in the elderly. Characteristics of** diagnosis **and** therapy]
Herzinsuffizienz im Alter. Besonderheiten bei Diagnostik und Therapie.
Jun 1 2000

36/7,K/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0000134083 BIOSIS NO.: 196905034064
DIAGNOSTIC **AND** THERAPEUTIC **VALUE OF BEDSIDE MONITORING OF LEFT VENTRICULAR PRESSURE ABSTRACT HUMAN SHOCK** HEART FAILURE
AUTHOR: COHN J N; KHATRI I M; HAMOSH P
JOURNAL: American Journal of Cardiology 23 (1): p107-108 1969
ISSN: 0002-9149
DOCUMENT TYPE: Article
RECORD TYPE: Citation
LANGUAGE: Unspecified
DESCRIPTORS: **DIAGNOSTIC THERAPEUTIC** VALUE BEDSIDE MONITORING LEFT VENTRICULAR PRESSURE ABSTRACT HUMAN SHOCK **HEART FAILURE**

36/7,K/12 (Item 12 from file: 73)
DIALOG(R)File 73:EMBASE

05031306 EMBASE No: 1992171522
Diastolic left ventricular dysfunction - Important differential diagnosis **and** therapy **of** cardiac insufficiency **in old age**
DIASTOLISCHE LINKSVENTRIKULARE DYSFUNKTION - BEDEUTUNG FUR DIE DIFFERENTIALDIAGNOSTIK UND -THERAPIE DER HERZINSUFFIZIENZ IM ALTER
Josephs W.; Odenthal H.-J.; Lenga P.; Konermann M.; Wiechmann H.W.
Medizinische Universitatsklinik, Ruhr-Universitat Bochum, Marienhospital, Holkeskampring 40,4690 Herne 1 Germany
Zeitschrift fur Gerontologie (Z. GERONTOL.) (Germany) 1992, 25/2 (94-100)
CODEN: ZGERA ISSN: 0044-281X
DOCUMENT TYPE: Journal; Review
LANGUAGE: GERMAN SUMMARY LANGUAGE: GERMAN; ENGLISH
MEDICAL DESCRIPTORS:
* **diagnostic** test; *diastolic blood pressure; * **heart failure** -- **diagnosis** --di; * **heart failure** --etiology--et; * **heart failure** --drug **therapy** --dt; *heart left ventricle function; *pathophysiology

36/7,K/17 (Item 17 from file: 73)
DIALOG(R)File 73:EMBASE

05677349 EMBASE No: 1994093233
Mathematical model of cardiovascular mechanics for diagnostic **analysis and treatment of** heart failure **: Part 2 analysis of vasodilator** therapy **and planning of optimal drug** therapy
Tsuruta H.; Sato T.; Ikeda N.
Department of Medical Informatics, School of Medicine, Kitasato

University,Sagamihara, Kanagawa 228 Japan
Medical and Biological Engineering and Computing (MED. BIOL. ENG. COMPUT.) (United Kingdom) 1994, 32/1 (12-18)
CODEN: MBECD ISSN: 0140-0118
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
Using a mathematical model of cardiovascular mechanics, various complicated responses to vasodilator therapy for **heart failure** have been well accounted for through common logic: (i) the differential effects of various vasodilators on cardiac output; (ii) the opposite response of cardiac output to sodium nitroprusside in a **normal state and heart failure state**; (iii) the different responses of cardiac index, arterial pressure and left **ventricular** end-diastolic pressure to hydralazine in different types of **heart failure**. The response to combined vasodilator-inotropic agent therapy was simulated well by the model. The optimal therapeutic regimen was then formulated to simultaneously control the cardiac output, systemic and pulmonary arterial and venous pressures, and the degree of coronary ischaemia by multiple drug delivery, and the problem was solved using the model. We conclude that the model provides a useful basis for obtaining a guidance for more appropriate therapeutic regimen in heart failure.
MEDICAL DESCRIPTORS:
*cardiovascular system; * **heart failure** -- **diagnosis** --di; * **heart failure** -- **therapy** --th; *mathematical model; *drug delivery system

36/7,K/35 (Item 35 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2004 The Dialog Corp. All rts. reserv.
10719974 PMID: 10838829
Chronic heart failure . Diagnosis **and** therapy]
Chronische Herzinsuffizienz. Diagnose und Therapie.
Schwinger R H
Klinik III fur Innere Medizin, Universitat zu Koln. Robert.Schwinger@Medizin.uni-koeln.de
Medizinische Monatsschrift fur Pharmazeuten (GERMANY) May 2000, 23 (5) p142-8, ISSN 0342-9601 Journal Code: 7802665
Document type: Journal Article; Review; Review, Tutorial
Languages: GERMAN
Main Citation Owner: NLM
Record type: Completed
(13 Refs.)
Record Date Created: 20000630
Record Date Completed: 20000630
Descriptors: Angiotensin-Converting Enzyme Inhibitors-- **therapeutic** use --TU; *Digitalis Glycosides-- **therapeutic** use--TU; *Diuretics-- **therapeutic** use--TU; * **Heart Failure** , Congestive-- **diagnosis** --DI; * **Heart Failure** , Congestive--drug **therapy** --DT

```
File  98:General Sci Abs/Full-Text 1984-2004/Feb
File   9:Business & Industry(R) Jul/1994-2004/Mar 15
File  16:Gale Group PROMT(R) 1990-2004/Mar 16
File 160:Gale Group PROMT(R) 1972-1989
File 148:Gale Group Trade & Industry DB 1976-2004/Mar 09
File 621:Gale Group New Prod.Annou.(R) 1985-2004/Mar 16
File 149:TGG Health&Wellness DB(SM) 1976-2004/Mar W1
File 636:Gale Group Newsletter DB(TM) 1987-2004/Mar 16
File 441:ESPICOM Pharm&Med DEVICE NEWS 2004/Mar W1
File 369:New Scientist 1994-2004/Mar W1
File 370:Science 1996-1999/Jul W3
Set     Items   Description
S1      50940   (HEART OR CARDIAC OR MYOCARDIAL OR CORONARY)()(FAILURE? ? -
             OR INSUFFICIENCY OR DECOMPENSATION) OR CONGESTIVE()HEART()(DI-
             SEASE OR FAILURE) OR CHF
S2      23007   HEART()(RATE OR RATES)
S3         35   VENTRICULAR()CONTRACTILE()FORCE? ? OR FORCE? ? (3N)(VENTRI-
             CLE OR VENTRICULAR)(2N)CONTRACT????
S4     796054   NORMAL OR ROUTINE
S5     759832   THERAP?
S6       2534   DECOMPENSAT?
S7    2635322   MONITOR? OR TRACK???
S8          0   IC=(A61B-000 OR A61B-005)
S9          7   S2(S)S3
S10         3   S1(S)S9
S11         0   S7(S)S10
S12        35   S1(S)S5(S)S7(S)S6
S13        19   RD (unique items)
S14         6   S13/2001:2004
S15        13   S13 NOT S14
S16        13   Sort S15/ALL/PD,A
S17        71   S1(S)S4(S)(S9 OR S6)
S18   1959497   TREAT????
S19     97481   (S5 OR S18)(S)S7
S20        25   S17 AND S19
S21        18   S20 NOT S12
S22        14   RD (unique items)
S23         4   S22/2001:2004
S24        10   S22 NOT S23
S25        10   Sort S24/ALL/PD,A

10/8/1     (Item 1 from file: 148)
DIALOG(R)File 148:(c)2004 The Gale Group. All rts. reserv.
03123494     SUPPLIER NUMBER: 04748698    (USE FORMAT 7 OR 9 FOR FULL TEXT)
CHF: when vasodilators are indicated. (panel discussion)
Feb 15, 1987
WORD COUNT:   2798    LINE COUNT:  00229
 SPECIAL FEATURES:  illustration; chart
 INDUSTRY CODES/NAMES:  HLTH   Healthcare
 DESCRIPTORS:  Congestive heart failure--Drug therapy; ACE inhibitors
 SIC CODES:  8011  Offices & clinics of medical doctors

 10/8/2     (Item 1 from file: 149)
DIALOG(R)File 149:(c) 2004 The Gale Group. All rts. reserv.
01703248     SUPPLIER NUMBER: 19559737    (USE FORMAT 7 OR 9 FOR FULL TEXT)
Tissue oxygenation and routine nursing procedures in critically ill
```

patients.(Cardiovascular Disease in Vulnerable Populations)
1997
WORD COUNT: 8056 LINE COUNT: 00740
SPECIAL FEATURES: table; chart; illustration
DESCRIPTORS: Cardiac patients--Care and treatment; Intensive care nursing--Management

16/8/5 (Item 5 from file: 149)
DIALOG(R)File 149:(c) 2004 The Gale Group. All rts. reserv.
01611660 SUPPLIER NUMBER: 17872805 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cardiopulmonary rehab program can ease effects of COPD. (chronic obstructive pulmonary disease)(includes related information on caring for COPD)
1996
WORD COUNT: 1915 LINE COUNT: 00169
DESCRIPTORS: Lung diseases, Obstructive--Care and treatment; Exercise therapy--Usage

16/8/6 (Item 6 from file: 149)
DIALOG(R)File 149:(c) 2004 The Gale Group. All rts. reserv.
01620391 SUPPLIER NUMBER: 18326967 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Current trends in cardiovascular pharmacology.(Special Series: Cardiopulmonary Physical Therapy)
1996
WORD COUNT: 12453 LINE COUNT: 01130
SPECIAL FEATURES: illustration; table
DESCRIPTORS: Cardiovascular system--Effect of drugs on; Pharmaceutical research--Analysis; Hypertension--Drug therapy; Congestive heart failure --Drug therapy; Coronary heart disease--Drug therapy

16/8/7 (Item 7 from file: 149)
DIALOG(R)File 149:(c) 2004 The Gale Group. All rts. reserv.
01714706 SUPPLIER NUMBER: 19709114 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The serum digoxin concentration: ten questions to ask. (includes patient information)
1997
WORD COUNT: 3371 LINE COUNT: 00299
SPECIAL FEATURES: table; chart; graph; illustration
DESCRIPTORS: Digoxin--Therapeutic use

16/8/11 (Item 11 from file: 148)
DIALOG(R)File 148:(c)2004 The Gale Group. All rts. reserv.
11952297 SUPPLIER NUMBER: 61408589 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Brain natriuretic peptide as bridge to therapy for heart failure.(Commentary)(Brief Article)(Statistical Data Included)
April 1, 2000
WORD COUNT: 1509 LINE COUNT: 00131
DESCRIPTORS: Neuropeptides--Therapeutic use; Heart--Health aspects; Heart failure--Care and treatment

16/8/12 (Item 12 from file: 16)
DIALOG(R)File 16:(c) 2004 The Gale Group. All rts. reserv.
07994400 Supplier Number: 63125276 (USE FORMAT 7 FOR FULLTEXT)
Rapid Test Helps Identify Cause of Dyspnea.(point-of-care brain natriuretic peptide immunoassay)(Brief Article)
May 1, 2000

Word Count: 586
PUBLISHER NAME: International Medical News Group
COMPANY NAMES: *Biosite Diagnostics Inc.
EVENT NAMES: *310 (Science & research)
GEOGRAPHIC NAMES: *1USA (United States)
PRODUCT NAMES: *3841303 (Diagnostic Test Kits & Reagents)
SIC CODES: 3841 (Surgical and medical instruments)
NAICS CODES: 339112 (Surgical and Medical Instrument Manufacturing)
SPECIAL FEATURES: COMPANY

16/8/13 (Item 13 from file: 9)
DIALOG(R)File 9:(c) 2004 Resp. DB Svcs. All rts. reserv.
2871574 Supplier Number: 02871574 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Scios sees success with Natrecor studies
July 31, 2000
WORD COUNT: 365
COMPANY NAMES: SCIOS INC
INDUSTRY NAMES: Pharmaceutical
PRODUCT NAMES: Cardiovascular agents (283427)
CONCEPT TERMS: All product and service information; Product development
GEOGRAPHIC NAMES: North America (NOAX); United States (USA)

16/3,AB,K/3 (Item 3 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.
04520172 SUPPLIER NUMBER: 08349285 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Heart failure with no apparent cause. (idiopathic dilated cardiomyopathy; includes related articles)
Abelmann, Walter H.; Fowler, Michael B.; Gilbert, Edward M.
Patient Care, v24, n2, p24(19)
Jan 30, 1990
ISSN: 0031-305X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 8461 LINE COUNT: 00738
... who do not have specific contraindications. In general the maximum age limit is 55 years, but an otherwise vigorous individual even in his or her 60s may be considered. Flexibility, not...transplant should be more frequent than but not otherwise different from any others with advanced **CHF** . At cardiac transplant clinics, the emphasis is on intensive outpatient care and the anticipation of...

16/3,AB,K/8 (Item 8 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2004 The Gale Group. All rts. reserv.
06295602 Supplier Number: 54477754
CardioDynamics "CDIC" Announces Pulmonary Hypertension BioZ Study Results at the American Thoracic Society Meeting, San Diego.
Business Wire, p0023
April 27, 1999
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 917
... effective treatment outcomes."
The Company also announced the publication of "Cost-Effectiveness of Noninvasive Hemodynamic **Monitoring** as a Screening Tool Prior to Initiation of Inotrope Infusion" in the April 1999 issue...
...technology as a screening tool to determine the necessity of initiating

the costly, intravenous inotropic **therapy** in **congestive heart failure** patients. The report also highlighted the BioZ.com's ability to guide **therapeutic** decisions in acutely **decompensated heart failure** patients, as well as reduce patient risks, such as dysrhythmias and infection...

16/3,AB,K/9 (Item 9 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2004 The Gale Group. All rts. reserv.
08302895 Supplier Number: 68744568
Refractory heart failure: Optimizing therapy, managing end-stage disease.
SANGRIGOLI, ROBERT; PINA, ILEANA L.
The Journal of Critical Illness, v14, n10, p571
Oct, 1999
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Refereed; Professional
Word Count: 7628
... patient who has **decompensated heart failure** centers on clearing vascular congestion with aggressive intravenous diuretic **therapy** and, when necessary, directly improving cardiac stroke volume by stimulating cardiac contraction and arterial vasodilatation. Your aggressiveness in **therapy** should be guided by the severity of symptoms, the findings of the physical examination, and possibly the results of invasive hemodynamic **monitoring** .
An important note: Evaluating hemodynamic status by clinical means in critically ill patients and those...

16/3,AB,K/10 (Item 10 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
(c) 2004 The Gale Group. All rts. reserv.
01897573 SUPPLIER NUMBER: 61432785 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Essentials of the Diagnosis of Heart Failure.
SHAMSHAM, FADI; MITCHELL, JUDITH
American Family Physician, 61, 5, 1319
March 1, 2000
PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0002-838X
LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
WORD COUNT: 4637 LINE COUNT: 00469
... converting enzyme (ACE) inhibitors, beta blockers or duretics).(16) Tachycardia may be a sign of heart failure , especially in the **decompensated** state. The heart rate increases as one of the compensatory ways...

25/8/1 (Item 1 from file: 148)
DIALOG(R)File 148:(c)2004 The Gale Group. All rts. reserv.
02179147 SUPPLIER NUMBER: 03432497 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Understanding calcium entry blocks. (roundtable)
Sept 15, 1984
WORD COUNT: 5838 LINE COUNT: 00488
SPECIAL FEATURES: illustration; portrait
INDUSTRY CODES/NAMES: HLTH Healthcare
DESCRIPTORS: diltiazem (medication)--Physiological aspects; Nifedipine--Physiological aspects; Calcium channel blockers--Physiological aspects; Cardiovascular agents--Usage; Vasodilators--Usage; Verapamil--Physiological aspects
NAMED PERSONS: Chatterjee, Kanu--Personal narratives; Hillis, L. Davis--

Personal narratives; Packer, Milton--Personal narratives; Schick, Edgar C., Jr.--Personal narratives; Kelly, Stephen P.--Personal narratives; Dickey, Nancy W.--Personal narratives

25/8/3 (Item 3 from file: 149)
DIALOG(R)File 149:(c) 2004 The Gale Group. All rts. reserv.
01426411 SUPPLIER NUMBER: 13275313 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Hemodynamic effects of oxygen therapy in patients with acute exacerbations of chronic obstructive pulmonary disease.
1993
WORD COUNT: 2799 LINE COUNT: 00282
SPECIAL FEATURES: illustration; table; graph
DESCRIPTORS: Oxygen therapy--Physiological aspects; Lung diseases, Obstructive--Care and treatment; Hemodynamics--Measurement

25/8/5 (Item 5 from file: 148)
DIALOG(R)File 148:(c)2004 The Gale Group. All rts. reserv.
08501219 SUPPLIER NUMBER: 17991331 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Treatment with angiotensin-converting-enzyme inhibitor for epirubicin-induced dilated cardiomyopathy.(Early Reports)
Feb 3, 1996
WORD COUNT: 2080 LINE COUNT: 00173
SPECIAL FEATURES: illustration; graph
INDUSTRY CODES/NAMES: HLTH Healthcare
DESCRIPTORS: Breast cancer--Complications; Congestive heart failure--Drug therapy; ACE inhibitors--Evaluation

25/8/6 (Item 6 from file: 149)
DIALOG(R)File 149:(c) 2004 The Gale Group. All rts. reserv.
01621334 SUPPLIER NUMBER: 18315357 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Twiddler's syndrome complicating a transvenous defibrillator lead system.
1996
WORD COUNT: 2003 LINE COUNT: 00169
SPECIAL FEATURES: illustration; photograph; diagnostic image
DESCRIPTORS: Pacemaker, Artificial (Heart)--Complications; Defibrillators--Complications; Ventricular tachycardia--Causes of

25/8/7 (Item 7 from file: 149)
DIALOG(R)File 149:(c) 2004 The Gale Group. All rts. reserv.
01788053 SUPPLIER NUMBER: 21023665 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The pressure-overloaded right ventricle in pulmonary hypertension.(Thomas L. Petty 40th Annual Aspen Lung Conference: Biology & Pathobiology of the Lung Circulation)
1998
WORD COUNT: 3393 LINE COUNT: 00313
SPECIAL FEATURES: table; chart; graph; diagram; diagnostic image; illustration
DESCRIPTORS: Heart ventricle, Right--Physiological aspects; Pulmonary hypertension--Models; Regional blood flow--Regulation

25/8/8 (Item 8 from file: 149)
DIALOG(R)File 149:(c) 2004 The Gale Group. All rts. reserv.
01790578 SUPPLIER NUMBER: 21081724 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cardiac effects of formoterol and salmeterol in patients suffering from COPD with preexisting cardiac arrhythmias and hypoxemia. (chronic obstructive pulmonary disease)

1998
WORD COUNT: 3003 LINE COUNT: 00293
SPECIAL FEATURES: table; graph; illustration
DESCRIPTORS: Formoterol--Physiological aspects; Salmeterol--Physiological aspects; Lung diseases, Obstructive--Drug therapy; Arrhythmia--Effect of drugs on

25/8/9 (Item 9 from file: 149)
DIALOG(R)File 149:(c) 2004 The Gale Group. All rts. reserv.
01802031 SUPPLIER NUMBER: 21210514 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The brain-heart connection: cardiac effects of acute ischemic stroke.
1998
WORD COUNT: 5325 LINE COUNT: 00502
SPECIAL FEATURES: illustration; table; chart
DESCRIPTORS: Stroke (Disease)--Psychological aspects

25/3,AB,K/2 (Item 2 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.
03940650 SUPPLIER NUMBER: 07039030 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The limited reliability of physical signs for estimating hemodynamics in chronic heart failure.
Stevenson, Lynne Warner; Perloff, Joseph K.
JAMA, The Journal of the American Medical Association, v261, n6, p884(5)
Feb 10, 1989
ISSN: 0098-7484 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 4216 LINE COUNT: 00356
ABSTRACT: In **chronic heart failure**, the ability of the heart to pump blood is diminished, so that it provides a blood flow which does not meet the demands of the body. Patients with this condition need constant surveillance by their doctors. The reliability of using simple measurements to assess these patients was evaluated. Heart failure is associated with an abnormal third heart sound, lung noises (rales), abnormal jugular vein pulses, and the collection of tissue fluid in the subcutaneous tissues of the body (edema). Fifty patients who were known to have **heart failure** underwent various anatomical and physiological measurements of their hearts and blood-vessel systems, and the results were correlated to the findings of physical examinations. Although several of these signs (i.e., third sound, rales, jugular pulses and edema), when seen together were completely reliable indicators of the disease (100 percent specificity), they were only detected in approximately half of the patients (sensitivity of 58). Of these simple measurements, only pulse pressure (systolic pressure minus diastolic pressure; e.g. 120 over 80 = 40 pulse pressure) was a reliable index of the cardiac output (the amount of blood pumped by each side of the heart in one minute). These results indicate that more sophisticated testing is required to follow adequately the course of a patient with heart failure.
AUTHOR ABSTRACT: ABSTRACT: The cardiovascular physical examination is used commonly as a basis for **diagnosis** and **therapy** in **chronic heart failure**, although the relationship between physical signs, increased ventricular filling pressure, and decreased cardiac output has not been established for this population. We prospectively compared physical signs with hemodynamic measurements in 50 patients with known chronic heart failure (ejection fraction, .18 + / - .06). Rales, edema, and elevated mean jugular venous pressure were absent in 18 of 43 patients with pulmonary capillary wedge pressures greater than or equal to 22 mm Hg, for which the

combination of these signs had 58% sensitivity and 100% specificity. Proportional pulse pressure correlated well with cardiac index (r=.82), and when less than 25% pulse pressure had 91% sensitivity and 83% specificity for a cardiac index less than 2.2 L/min/[m.sup.2]. In **chronic heart failure**, reliance on physical signs for elevated ventricular filling pressure might result in inadequate therapy. Conversely, the adequacy of cardiac output is assessed reliably by pulse pressure. Our results facilitate decisions regarding treatment in chronic heart failure.
... the hemodynamic goals of therapy. Pulmonary capillary wedge pressure usually can be lowered to near- **normal** levels by diuretic and vasodilator therapy in the chronically dilated ventricle without compromising cardiac output...
...sup.2] represents a reasonable estimate of the minimum necessary for adequate organ perfusion with **normal** hemoglobin level and resting oxygen consumption. [n28] The efficacy of many vasodilator agents for increasing...

25/3,AB,K/10 (Item 10 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

01887775 SUPPLIER NUMBER: 59534852 (USE FORMAT 7 OR 9 FOR FULL TEXT)
ABC of heart failure.(Clinical Review)(Statistical Data Included)
Davies, M K; Gibbs, C R; Lip, G Y H
British Medical Journal, 320, 7230, 297
Jan 29, 2000
DOCUMENT TYPE: Statistical Data Included PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0959-8146 LANGUAGE: English
RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional
WORD COUNT: 2533 LINE COUNT: 00253
ABSTRACT: Physicians who suspect that a patient may have **heart failure** need clinical evaluation to support the possibility before going on to more detailed investigation of the condition. There are a variety of options available for determining the patient's condition with more precision. Echocardiography, when available, is the preferred choice for accurate diagnosis, but others will serve in its absence. Examination with chest x ray is useful, both for **diagnosis** and for **monitoring** response to **treatment** . The use of 12-lead electrocardiography has value, especially when combined with x rays. Blood and urine analyses can also be used for an accurate diagnosis.
... Chest x ray examination
The chest x ray examination has an important role in the **routine** investigation of patients with suspected **heart failure** , and it may also be useful in **monitoring** the response to **treatment** . Cardiac enlargement (cardiothoracic ratio (is greater than) 50%) may be present, but there is...
...a globular appearance. Echocardiography is required to distinguish reliably between these different causes, although in **decompensated heart failure** other radiographic features may be present, such as pulmonary congestion or pulmonary oedema...

```
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200417
File 347:JAPIO Nov 1976-2003/Nov(Updated 040308)
File 371:French Patents 1961-2002/BOPI 200209
Set     Items   Description
S1       9296   (HEART OR CARDIAC OR MYOCARDIAL OR CORONARY)()(FAILURE? ? -
            OR INSUFFICIENCY OR DECOMPENSATION) OR CONGESTIVE()HEART()(DI-
            SEASE OR FAILURE) OR CHF
S2       2668   HEART()(RATE OR RATES)
S3         12   VENTRICULAR()CONTRACTILE()FORCE? ? OR FORCE? ? (3N)(VENTRI-
            CLE OR VENTRICULAR)(2N)CONTRACT????
S4     376386   NORMAL OR ROUTINE
S5     104426   THERAP?
S6        147   DECOMPENSAT?
S7     671008   MONITOR? OR TRACK???
S8     247241   IC=A61B
S9          4   S2 AND S3
S10         0   S1 AND S9
S11         5   S1 AND S4 AND S6
S12         0   S11 AND S10
S13         2   S11 AND S8
S14         3   S11 NOT (S9 OR S13)
S15   1502026   TREAT?????
S16    143776   DIAGNOS?
S17    147011   (S5 OR S16) AND (S7 OR S16)
S18      1151   S1 AND S17
S19       115   S4 AND S18
S20        17   S8 AND S19
S21        15   S20 NOT (S9 OR S11 OR S13)
S22         0   S6 AND S21
S23         3   S6 AND S19
S24         0   S23 NOT (S9 OR S11 OR S13)

 9/7/2     (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004  Thomson Derwent. All rts. reserv.
009752612
WPI Acc No: 1994-032463/199404
```

Short paced AV interval therapy for vasovagal syncope treatment - by pacing ventricle during forceful contractions pref. on initial sensing of these so as to reduce forceful contractions and avoid initiation of reflex

```
Patent Assignee: ANONYMOUS (ANON )
Number of Countries: 001  Number of Patents: 001
Patent Family:
Patent No     Kind   Date     Applicat No    Kind   Date     Week
RD 356017      A   19931210  RD 93356017     A   19931120  199404  B
Priority Applications (No Type Date): RD 93356017 A 19931120
Patent Details:
Patent No  Kind Lan Pg   Main IPC    Filing Notes
RD 356017     A        A61N-000/00
Abstract (Basic): RD 356017 A
```

Periods of **forceful ventricular contractions** prior to reflex initiation is sensed eg by changes in **heart rate** dynamics, AV interval dynamics or cardiac performance eg right **ventricular** pressure. Upon initial sensing, the pacemaker could intervene with **ventricular** pacing with a short paced AV interval in order to reduce the **force** of the **ventricular contractions** and hence prevent the reflex.

Dwg.0/0
Derwent Class: P34; S05
International Patent Class (Main): A61N-000/00

13/7,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015877086 **Image available**
WPI Acc No: 2004-034919/200403
Calibration system for pressure measurement system, comprises first sensor and second sensors, and perturbation
Patent Assignee: EIGLER N (EIGL-I); MANN B (MANN-I); WHITING J (WHIT-I); SAVACOR INC (SAVA-N)
Inventor: EIGLER N; MANN B; WHITING J; EIGLER N L; MANN B M; WHITING J S
Number of Countries: 103 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200398177	A2	20031127	WO 2003US15174	A	20030514	200403 B
US 20040019285	A1	20040129	US 2002378166	P	20020514	200413
			US 2003438300	A	20030513	

Priority Applications (No Type Date): US 2003438309 A 20030513; US 2002378166 P 20020514; US 2003438300 A 20030513
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200398177	A2	E	64	G01L-000/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW

US 20040019285 A1	A61B-005/02	Provisional application US 2002378166	

Abstract (Basic): WO 200398177 A2

NOVELTY - A pressure measurement calibration system comprises first sensor(s) (25) for measuring first pressure at a first location within a medical patient, second sensor(s) (30) for measuring second pressure at a second location with respect to a medical patient, and a perturbation for calibrating the first sensor based on the first and second measured pressures.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of calibrating a pressure measurement system in pressure communication with a site within a medical patient, by measuring first pressure at a first location within the medical patient, measuring second pressure at a second location, inducing perturbation(s) to cause the first pressure to have a calculable relationship with the second pressure, determining adjustment factors based on the calculable relationship, and adjusting pressure measurement system based on adjustment factors.

USE - For calibrating pressure measurement system.

ADVANTAGE - The inventive calibration system is less invasive than the currently available calibration system.

DESCRIPTION OF DRAWING(S) - The figure is a schematic diagram of the inventive calibration system.

First sensor (25)

External coil (26)
Hand-held digital communication device (28)
Breathing apparatus (29)
Second sensor (30)
Caliber tubing (31)
pp; 64 DwgNo 9/11
Derwent Class: B07; P31; S02; S05
International Patent Class (Main): **A61B-005/02** ; G01L-000/00
Technology Focus:
... at least one Valsalva maneuver or Mueller maneuver; applying positive pressure artificial ventilation; performing unassisted **normal** ventilation; applying assisted positive pressure artificial ventilation; performing forced rhythmic breathing, sneezing, humming, coughing, abdominal...
...physiologic state, a relationship that differs according to whether the patient is in compensated or **decompensated heart failure** , a relationship that differs according to whether the patient has received at least one medication...

14/26,TI/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
015342411
WPI Acc No: 2003-403349/200338
Identifying cardiac decompensation **risks, by analyzing gene expression profile of a sample to identify expression of genes that are normally active only in embryonic phase in myocardial differentiation of stem cells**

14/26,TI/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
012851420
WPI Acc No: 2000-023252/200002
Treating decompensated heart failure, **allows treatment of patients who cannot tolerate vasodilators, ACE inhibitors and beta-adrenergic blocking agents**

21/26,TI/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
016009299
WPI Acc No: 2004-167150/200416
Method for diagnosing **clinical conditions e.g. cardiac arrhythmia common in a hemodialysis patient involves associating symptoms of the patient and applying clinical** diagnosis **algorithm for the symptom**

21/26,TI/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
015320641
WPI Acc No: 2003-381576/200336
Diagnosing **whether a subject has, or is at risk of developing, a disease or condition related to Reptin (e.g. myocardial infarction or cancer), by determining whether the subject has a mutation in a gene encoding the Reptin protein**

21/26,TI/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
015124283
WPI Acc No: 2003-184806/200319
Three-lead synchronous routine **electrocardiogram integrated measuring time domain index and correcting method**

21/26,TI/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
015059978
WPI Acc No: 2003-120494/200311
Diagnosing **myocardial ischemia or myocardial necrosis in a patient comprises determining a level of B-type natriuretic peptide (BNP) or BNP-related marker to the presence or absence of myocardial ischemia in the patient**

21/26,TI/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
014016304
WPI Acc No: 2001-500518/200155
Arteriosclerosis evaluation device computes arteriosclerosis index based on comparing normal **and actual pulse wave propagation velocities**

21/26,TI/12 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
008811855
WPI Acc No: 1991-315868/199143
Diagnosing **latent** cardiac insufficiency **during myocardial infarction - involves infusion of nitroglycerin soln. measuring finite-diastolic vol. of left ventricle and impact vol. and using them as indicators**

21/26,TI/13 (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
003676296
WPI Acc No: 1983-36267K/198315
Arteriosclerotic, vegetable vascular coronary insufficiency diagnosis - **differentially, from quantity of oleic and stearic acid in urine**

21/26,TI/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
003360889
WPI Acc No: 1982-L8914E/198236
Cardiac insufficiency diagnosis **- by determining functional dead space, respiratory volume and lung diffusion capacity**

21/26,TI/15 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.
03801031
ELECTROCARDIOGRAPH

21/7,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015949182 **Image available**
WPI Acc No: 2004-107023/200411
Heart monitoring system for diagnosing performance level of heart in patient, comprises temperature sensor for determining core body temperature, bodily activity sensor for determining bodily activity level, and communication link
Patent Assignee: SPINELLI J (SPIN-I); ZHU Q (ZHUQ-I)
Inventor: SPINELLI J; ZHU Q
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030220582	A1	20031127	US 2002154142	A	20020522	200411	B

Priority Applications (No Type Date): US 2002154142 A 20020522
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030220582	A1		12	A61B-005/00	

Abstract (Basic): US 20030220582 A1

NOVELTY - A heart **monitoring** system comprises temperature sensor for determining core body temperature, bodily activity sensor for determining bodily activity level, and communication link for transmitting the core body temperature and bodily activity level to external **monitor** .

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for **diagnosing** a performance level of heart in patient comprising determining a core body temperature, determining bodily activity level, determining relationship between the core body temperature and bodily activity level, and generating first alarm message in response to determining that the relationship between the core body temperature and bodily activity level is outside of a predetermined acceptable relationship range.

USE - For **diagnosing** performance level of patient heart(claimed).

ADVANTAGE - The invention can determine when the core body temperature level and activity of a **heart failure** patient is outside of an acceptable range.

DESCRIPTION OF DRAWING(S) - The figure is a graph depicting the relationship between observed core body temperature measurements and heart rate measurements in **normal** patients and in **heart failure** patients.

pp; 12 DwgNo 1/4

Derwent Class: B04; P31; S05
International Patent Class (Main): **A61B-005/00**
Technology Focus:

... Preferred Component: The temperature sensor, bodily activity sensor, and external **monitor** are implanted in the patient's body. The communication link is a wireless communication link. The external **monitor** is operative to determine a relationship between the core body temperature and bodily activity level...

...bodily activity level is outside a predetermined acceptable range, transmit an alarm to a remote **monitoring** station when the relationship between the core body temperature and the bodily activity level is...

...acceptable range, and transmit the core body temperature and bodily activity level to a remote **monitoring** station...

...Preferred Process: The **diagnosing** of performance level of heart of

patient further includes determining whether the core body temperature...

21/7,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015409079 **Image available**
WPI Acc No: 2003-471219/200345
Active medical device, e.g. pacemaker, with respiratory profile diagnosis facility includes discriminator which, by signal analysis, can discriminate between different types of respiratory profiles
Patent Assignee: ELA MEDICAL SA (ELAM-N); BONNET J (BONN-I); LIMOUSIN M (LIMO-I)
Inventor: BONNET J; LIMOUSIN M; BONNET J L
Number of Countries: 031 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1295623	A1	20030326	EP 2002292335	A	20020924	200345 B
US 20030078619	A1	20030424	US 2002255144	A	20020924	200346
FR 2829917	A1	20030328	FR 200112239	A	20010924	200353
EP 1295623	B1	20040114	EP 2002292335	A	20020924	200406

Priority Applications (No Type Date): FR 200112239 A 20010924
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1295623	A1	F	9	A61N-001/37	
	Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR				
US 20030078619	A1			A61N-001/36	
FR 2829917	A1			A61B-005/08	
EP 1295623	B1	F		A61N-001/37	
	Designated States (Regional): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR				

Abstract (Basic): EP 1295623 A1

NOVELTY - Medical device, e.g. pacemaker, defibrillator, etc., can measure respiratory activity and produces a signal (26) representing the periodicity and amplitude of a patient's successive respiratory cycles, namely a minute respiratory volume signal. The medical device includes a discriminator which, by signal analysis, can discriminate between different types of respiratory profiles, and can **diagnose** a Cheyne-Stokes-type respiratory profile.

DETAILED DESCRIPTION - The discriminator detects alternation of hyperventilation respiratory cycles (20) separated by respiratory pauses (22) or periods of hyperventilation or **normal** breathing (24), and discriminates between periods of respiratory pause and periods of hyperventilation or **normal** breathing by analysis of second order variations of the signal.

The discriminator analyses second order variations of the signal by retrieving the peaks (32) of this signal (26) and evaluating the interval (36) between successive peaks.

USE - In medicine, for assessing respiratory problems in patients who are suffering from **cardiac insufficiency** .

ADVANTAGE - The active medical device can detect the presence of respiratory problems, and can automatically and reliably discriminate between different respiratory profiles.

DESCRIPTION OF DRAWING(S) - The drawing shows a time chart (chronogram) illustrating the duration of respiratory pauses for the development of a minute respiratory volume signal, as well as

Cheyne-Stokes respiration (CSR) or Periodic Breathing (PB) markers generated, when necessary, by the active medical device.
Hyperventilation respiratory cycles (20)
Respiratory pause (22)
Patient's respiratory signal (26)
Peaks of patient's respiratory signal (32)
Interval between peaks of patient's respiratory signal (36)
Threshold value (38)
pp; 9 DwgNo 6/7
Derwent Class: P31; P34; S05
International Patent Class (Main): **A61B-005/08** ; A61N-001/36; A61N-001/37
International Patent Class (Additional): A61N-001/365
Technology Focus:
... discriminator can compare a threshold value (38) of the interval between successive peaks and can **diagnose** a Cheyne-Stokes-type respiratory profile only for intervals of time longer than that of...

21/7,K/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
014708125 **Image available**
WPI Acc No: 2002-528829/200256
Implantable device for monitoring acute cardiac dysfunction, applies pacing pulses to effect contraction of heart chamber, and stimulus to induce post-extrasystolic potentiation to increase strength
Patent Assignee: MEDTRONIC INC (MEDT); BENNETT T D (BENN-I); DENO D C (DENO-I); HILL M S (HILL-I); IGEL D A (IGEL-I); MULLIGAN L J (MULL-I)
Inventor: BENNETT T D; DENO D C; HILL M R S; IGEL D; HILL M S; IGEL D A; MULLIGAN L J
Number of Countries: 023 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200253228	A1	20020711	WO 2001US49620	A	20011227	200256 B
US 6438408	B1	20020820	US 2000751079	A	20001228	200257
US 20020115939	A1	20020822	US 2000751079	A	20001228	200258
EP 1345651	A1	20030924	EP 2001991449	A	20011227	200363
			WO 2001US49620	A	20011227	

Priority Applications (No Type Date): US 2000751079 A 20001228
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200253228	A1	E	88	A61N-001/365	
	Designated States (National): CA JP				
	Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR				
US 6438408	B1			A61B-005/0452	
US 20020115939	A1			A61B-005/00	
EP 1345651	A1	E		A61N-001/365	Based on patent WO 200253228
	Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR				

Abstract (Basic): WO 200253228 A1
NOVELTY - The inventive implantable stimulator/ **monitor** measures a group of **heart failure** parameters, indicative of a patient's state of **heart failure** , by measuring EGM signals, blood pressure and heart chamber volume over one or more cardiac cycles. The parameters include relaxation/contraction time constant 'TAB', mechanical restitution, recirculation fraction, and end systolic elastance. These

parameters are determined periodically, irrespective of patient posture/activity level. Data is time/date stamped and stored in the implantable device memory, for later retrieval using conventional telemetry. Certain data is only stored when the patient's heart rate is regular and within a **normal** sinus range. Incremental changes in data over time provide a measure of the degree of change in **heart failure** state of the patient.

USE - To obtain cardiac data for assessment of patient's contractile dysfunctional state, using enhanced signal processing of simple-to-measure signals.

ADVANTAGE - By storing patient heart parameter data over time, the physician is able to initiate uplink telemetry of the data for review and assessment of **heart failure** state, and provide appropriate **therapy** accordingly, e.g. drug or electrical pacing/stimulation **therapy** , of particular benefit for chronic **congestive heart failure** patients, and of value also to those prone to tachy-arrhythmias for setting parameters of detection/classification and prescribing **therapies** required, but applicable also over a wide range of acute cardiac dysfunctions such as cardiogenic shock, drug overdosing including beta-blockers, post-cardiac bypass surgery with cardioplegia, severe respiratory dysfunction and hypoxia, coronary artery ischemia, and acute myocardial infarction.

DESCRIPTION OF DRAWING(S) - The drawing presents a flow-chart for **monitoring** an implantable medical device, measuring parameters indicative of patient state of **heart failure** such as EGM signals, absolute blood pressure and rate of change thereof.

pp; 88 DwgNo 4/22

Derwent Class: P34; S05; T01
International Patent Class (Main): **A61B-005/00** ; **A61B-005/0452** ; A61N-001/365

21/7,K/10 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
013673795 **Image available**
WPI Acc No: 2001-158007/200116
Patient well-being assessing apparatus, particularly for determining effective changes in mode of pacing of congestive heart failure (CHF) **patients on** routine **activities**
Patent Assignee: CARDIAC PACEMAKERS INC (CARD-N)
Inventor: KADHIRESAN V A; SPINELLI J C
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6135970	A	20001024	US 9876025	A	19980511	200116 B
			US 99344668	A	19990625	
			US 99456767	A	19991207	

Priority Applications (No Type Date): US 99344668 A 19990625; US 9876025 A 19980511; US 99456767 A 19991207
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6135970	A		10	A61B-005/103	CIP of application US 9876025
					Cont of application US 99344668
					Cont of patent US 6021351

Abstract (Basic): US 6135970 A
NOVELTY - Accelerometer is used in cardiac pacing during **therapy**

as sensor (10) to sense parameter relating to patients activity level and to generate corresponding electric signal. A microprocessor (22) samples and compares the electrical signal to a threshold at random within predetermined time interval.

DETAILED DESCRIPTION - The frequency with which average rectified sensor output exceeds a preset threshold is noted. A display device operatively coupled to the microprocessor presents tally related information in human perceptible form.

USE - For assessing changes in well being of patients, especially **congestive heart failure** patients with pacing **therapy**.

ADVANTAGE - Apparatus can also be used to assess efficacy of different rate responsive algorithms for rate responsive pacemakers. A single sensor accelerometer may be used to **monitor** patient activity.

DESCRIPTION OF DRAWING(S) - Drawing shows block diagram of circuitry for processing raw signal coming from accelerometer.

Accelerometer (sensor) (10)

Microprocessor (22)

pp; 10 DwgNo 5/8

Derwent Class: P31; S02; S05; T01

International Patent Class (Main): **A61B-005/103**

21/7,K/11 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

013540087 **Image available**

WPI Acc No: 2001-024293/200103

Congestive heart failure **patient** monitoring **involves obtaining subsequent body temperature of patient and temperature corresponding to any preset criteria showing** congestive heart failure **hypothermia is determined**

Patent Assignee: CASSCELLS S W (CASS-I); PAYVAR S (PAYV-I)

Inventor: CASSCELLS S W; NAGHAVI M; SIADATY M S; PAYVAR S

Number of Countries: 090 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200053084	A1	20000914	WO 2000US6081	A	20000307	200103	B
AU 200038718	A	20000928	AU 200038718	A	20000307	200105	
EP 1171026	A1	20020116	EP 2000917803	A	20000307	200207	
			WO 2000US6081	A	20000307		
US 6454707	B1	20020924	US 99123342	P	19990308	200266	
			US 2000519122	A	20000306		
US 20030092975	A1	20030515	US 99123342	P	19990308	200335	
			US 2000519122	A	20000306		
			US 2002247667	A	20020919		

Priority Applications (No Type Date): US 2000519122 A 20000306; US 99123342 P 19990308; US 2002247667 A 20020919

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200053084	A1	E	37	A61B-005/00	

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200038718	A			Based on patent WO 200053084
EP 1171026	A1	E	A61B-005/00	Based on patent WO 200053084

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

US 6454707 B1 A61B-005/00 Provisional application US 99123342
US 20030092975 A1 A61B-005/00 Provisional application US 99123342
CIP of application US 2000519122
CIP of patent US 6454707

Abstract (Basic): WO 200053084 A1

NOVELTY - The initial body temperature of patient which is not above the **normal** temperature, is obtained. Then, subsequent body temperature is obtained and the temperature which corresponds to any of predetermined criteria showing condition of **congestive heart failure** hypothermia, is determined.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) method of predicting time remaining to death absent intervention for a patient with **congestive heart failure** ;

(b) method of warning of imminent mortality in patient suffering from **congestive heart failure** absent **therapeutic** intervention;

(c) method of predicting imminent mortality in patient;

(d) **congestive heart failure** patient **monitoring** apparatus;

(e) temperature **monitoring** kit;

(f) temperature measurement analyzing device;

(g) patient's imminent mortality alarm providing apparatus;

(h) temperature sensor.

USE - For predicting mortality in patients with **congestive heart failure** .

ADVANTAGE - The device is a beeper worn against skin, that emits alarm to wearer and by telemetry to a station where action can be taken in aid of wearer. Enables to carefully **monitor** congestive heat failure in patient's body temperature that helps to save patient's lives by providing notice of change in prognosis in time to alter the **therapy** being administered. Thus, provides more accurate prognosis for patient and their families.

DESCRIPTION OF DRAWING(S) - The figure shows schematic diagram of temperature measurement for occurrence of hypothermia.

pp; 37 DwgNo 9/9

Derwent Class: P31; S05

International Patent Class (Main): **A61B-005/00**

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File 348:EUROPEAN PATENTS 1978-2004/Mar W01
File 349:PCT FULLTEXT 1979-2002/UB=20040311,UT=20040304
Set     Items   Description
S1      14416   (HEART OR CARDIAC OR MYOCARDIAL OR CORONARY)()(FAILURE? ? -
             OR INSUFFICIENCY OR DECOMPENSATION) OR CONGESTIVE()HEART()(DI-
             SEASE OR FAILURE) OR CHF
S2       7764   HEART()(RATE OR RATES)
S3        124   VENTRICULAR()CONTRACTILE()FORCE? ? OR FORCE? ? (3N)(VENTRI-
             CLE OR VENTRICULAR)(2N)CONTRACT????
S4     435722   NORMAL OR ROUTINE
S5     164869   THERAP?
S6        502   DECOMPENSAT?
S7     376211   MONITOR? OR TRACK???
S8     502567   TREAT?????
S9     121488   DIAGNOS?
S10     51808   IC=A61B
S11     78568   (S5 OR S8)(S)(S7 OR S9)
S12     10181   S4(S)S11
S13       130   S1(S)S12
S14       517   S2(S)S3 OR S6
S15         7   S13(S)S14
S16         3   S15 AND S10
S17         4   S15 NOT S16
S18       119   S1(S)S11 AND S10
S19         5   S14(S)S1(S)S11 AND S10
S20         2   S19 NOT S15

 16/6/2     (Item 2 from file: 349)
00477244    **Image available**
MEASUREMENT OF CAPILLARY RELATED INTERSTITIAL FLUID USING ULTRASOUND
    METHODS AND DEVICES

 16/3,AB,K/3     (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00361661
IMPLANTABLE SENSOR AND SYSTEM FOR MEASUREMENT AND CONTROL OF BLOOD
    CONSTITUENT LEVELS
CAPTEUR ET SYSTEME IMPLANTABLES DE MESURE ET DE REGULATION DE TAUX DE
    CONSTITUANTS SANGUINS
Patent Applicant/Assignee:
  THOMAS JEFFERSON UNIVERSITY,
  JOSEPH Jeffrey I,
  SUN Xiaoguang,
Inventor(s):
  JOSEPH Jeffrey I,
  SUN Xiaoguang,
Patent and Priority Information (Country, Number, Date):
  Patent:              WO 9701986 A1 19970123
  Application:         WO 96US11435 19960708  (PCT/WO US9611435)
  Priority Application: US 95500388 19950706
Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB
  GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ
  PL PT RO RU SD SE SI SK TJ TM TR TT UA US UZ VN KE LS MW SD SZ UG AM AZ
  BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
  BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
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Publication Language: English
Fulltext Word Count: 15418
English Abstract

This invention is an implantable sensor and system capable of measuring, controlling, monitoring and reporting blood constituent levels. The implantable sensor (14) for sensing in vivo the level of at least one blood constituent in mammalian vascular tissue (20, 24) having at least one source of radiation from infrared through visible light, arranged to direct the radiation at the tissue where it is affected by interaction with the tissue, and at least one detector. The invention also encompasses a device for measuring and controlling the level of a blood constituent, such as glucose or oxygen, and includes an implantable infrared source and sensor module for generating an output signal representative of the sensed infrared radiation. The system includes a processor module responsive to the output signal which performs spectral analysis of the output signal and generates a control signal. The system further includes other devices for dispensing (16) doses of medications or controlling organ function in response to the control signal.

Main International Patent Class: **A61B-005/00**
Fulltext Availability: Detailed Description
Detailed Description
... on patients with chronic illnesses such as **heart failure** and respiratory failure. Patients would be **monitored** for changes in hemoglobin oxygen saturation (pulse oximeter), hemoglobin concentration (infrared measurement), and changes in tissue perfusion (analysis of the photoplethsmograph waveform) for the purpose of detecting cardiovascular **decompensation** early so that the physician can manage the problem as an outpatient. Visits to the...
...the physician would be notified automatically if data changed significantly from the individual patient's **normal** pattern. Typically, patients wait until significant cardiovascular **decompensation** has produced overt symptoms requiring admission through the emergency room to the ICU. With this implantable sensor, physicians will be able to detect early **decompensation** and institute corrective **therapy** as an outpatient. Data stored in the memory chip will provide the clinician with the natural history of the disease process. The physician will be able to titrate medical **therapy** based on - 27 objective numbers and conclude from the data the benefits incurred by this **therapy**. All of the major determinants of oxygen delivery to the tissues can be measured with this sensor. For example, a patient develops **heart failure** and pulmonary edema following a myocardial infarction. Once stabilized in the ICU a sensor would...

17/6/2 (Item 1 from file: 349)
01070048 **Image available**
SELECTIVE NERVE FIBER STIMULATION FOR TREATING HEART CONDITIONS

17/3,AB,K/4 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00901894
METHOD AND APPARATUS TO MINIMIZE THE EFFECTS OF A CARDIAC INSULT
PROCEDE ET APPAREIL DESTINES A MINIMISER LES EFFETS D'UN ACCIDENT CARDIAQUE
Patent Applicant/Assignee:
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Legal Representative:
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Patent and Priority Information (Country, Number, Date):
Patent: WO 200234330 A2-A3 20020502 (WO 0234330)
Application: WO 2001US45698 20011026 (PCT/WO US0145698)
Priority Application: US 2000243393 20001026
Designated States: CA JP
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
Publication Language: English
Filing Language: English
Fulltext Word Count: 9847
English Abstract

A method and apparatus are provided for protecting cardiac tissue from insult. The method comprises identifying the occurrence of an insult, such as a heart attack, and delivering electrical stimulation to one or more predetermined nerves in a patient's body in response to identifying the occurrence of the insult. The stimulation may be provided to peripheral nerves, intrinsic cardiac nerves, sympathetic ganglia, cranial nerves, and may generally be directed to the vertebral column, or within the chest wall of the patient.

Fulltext Availability: Claims
Claim

... effects on the I 0 cardiovascular system is provided. Use of the stimulation minimizes arrhythinia, **heart failure** , and damage to cardiac myocytes due to the occurrence of a predicted and subsequent ischemic...

...of the heart and may be used to reduce the likelihood of imminent cardiac insults. **Therapeutic** benefits associated with the instant invention may be derived from application of the instant invention...

...damage or mechanical, chemical, or electrical impairment of cardiac tissue due to conditions such as **heart failure** , ventricular tachycardia, supraventricular tachycardia, ischernia, imbalance of autonomic tone, or the like. In the illustrated embodiment, the current invention may also be utilized to **treat** ventricular dysfunction or **heart failure** . As shown in Figures I A and I B, an external system I 00 provides...

...flow. This ftirther improves the efficiency of the heart. In ischemic dilated cardiomyopathy patients, this **therapy** may suppress or reduce subendocardial ischerma, and hence be cardio-protective. Electrical stimulation may further...device as shown in Figures 1 A and I B. This is useful in providing **therapeutic** signals to a patient who is anticipating exertion or any other type of event that...

...T4 I 0 region, or in the area of referred pain, then initiate stimulation to **treat** a patient that is having a heart attack. A surgeon may likewise initiate this type of **therapy** prior to perfon-ning a surgical procedure such as the insertion of a stent, or...

...predict the possible on-set of physiologic conditions such as ventricular dysfunction, 1 5 ischernia, **heart failure** , or any other type of cardiac insult. These sensors may be any of the types... entireties. Upon anticipation or detection of the cardiac event, the controller 104 may automatically begin **therapeutic treatment** of the

patient by subcutaneous electrically stimulating the selected nervous fissue(s). In the embodiment...
...include pressure and temperature sensors, and/or sensors that may externally measure blood chemistry. After **treatment** is initiated, **therapy** may continue during an insult. Such stimulation Could be continued until a cardiovascular intervention procedure...
...may be used as an indication of the patient's response I 0 to the **therapy** being administered by the controller 104. That is, a positive physiological response may be used as an indication that the **therapy** is achieving the desired result. The sensed physiological conditions may be used to adjust the...
...and later, detecting the continuation of) ischernia, an increased risk of VT/VF, a cardiovascular **decompensation** , and/or other types of cardiac insults to be discussed below. Any of the sensing systems listed below may be used to **monitor** physiological parameters to accomplish this function. In response to the detection of a particular physiologic state, the system adjusts the stimulation parameters to **treat** the detected or predicted abnormality. The system may a] so record trends in the sensed...
...artificial intelligence system that allows the device to learn from the effectiveness of the prior **therapy** . The system thereby becomes customized to deliver **therapy** that is optimally tailored for the individual patient. After stimulation is initiated in response to...
...and waveform shape. These parameters may be 1 5 continually modified as the response is **monitored** so that the optimal **treatment** may be delivered. After the insult such as an ischernic episode has subsided, stimulation may...
...a telemetry circuit. The physician may then evaluate the data and determine whether the delivered **thera**py requires modification, and whether it is desirable to enable the device to provide patientinitiated **therapy** in a manner to be discussed below. Additionally, the data may provide valuable information that may be used to deliver more effective manual **therapy** . In Figure 3, one or more sensors shown as sensors 302a through 302c are used...
...this result indicates that electrical stimulation is required, as determined by block 3 1 0, **therapy** is initiated. **Therapy** is initiated and controlled by a processing circuit, as represented by block 312. This processing circuit 312 provides the closed-loop feedback control used to modulate the level of **therapy** delivered. When **therapy** is to be discontinued, a ramp-down circuit shown in block 322 may be used...
...logic of block 3 1 0. This artificial intelligence analyzes the effectiveness of previously delivered **therapy** to adjust current **therapy** delivery techniques. **Therapy** is thereby tailored to individual patient needs. According to another manner of initiating **therapy** , the signals provided by the sensors 302a through 302c may be combined to generate a...
...or in place of, the signal on the line 309 for use in determining whether **therapy** should be initiated or modulated. In addition to closed-loop operation, Figure 3 also includes open-loop methods of initiating **therapy** , including patient-initiated **therapy** shown in block 320. Figure 4 illustrates a flowchart representation of one embodiment of operating...
...a determination is made as to whether ischemia is anticipated. This determination is based on **monitored** physiological parameters that may include detection of physical activity, a change in the ST segment...
...in paraspinal muscle tone, and/or a change in heart rate. Other

parameters may be **monitored** in a manner to be discussed further below. According to one aspect of the invention...
...by block 434, the stimulation level may be adjusted in block 436 based on the **monitored** parameters. This may include adjusting the rate, amplitude, duration, or waveform shape of electrical stimulation...
...type Of Stimulation may be correlated with the physiologic result of the stimulation so that **therapy** may be adjusted in the future. The stimulation may be modulated in block 436, with the **monitoring** of patient condition continuing in block 430. Stimulation may continue after the ischernia is actually...
...using a timer and a ramp-down I 0 mechanism to gradually disable the stimulation **therapy** . As noted above, a closed-loop system may be utilized to control initiation and delivery...
...the art to sense one or more physiological conditions that will be utilized to control **therapy** . Such sensors may include activity 1 5 sensors, sensors for detecting cardiac electrical or mechanical...
...for detecting autonomic activity or hemodynamic parameters, sensors for measuring blood chemistry, and mechanisms for **tracking** time-of-day, A partial exemplary listing of select types of sensing mechanisms that ... general categories of sensors, column 2 corresponds to a particular physiologic, parameter that may be **monitored** , column 3 outlines a corresponding sensor used to **monitor** the parameter, and column 4 relates to the type of physiologic condition or occurrence that may be anticipated using the measurement.
Table 1. Physiological Parameters to be Sensed or **Monitored**
GENERAL SPECIFIC ITEMS SENSfNG MET14 IT
MODALITY CORRESPONDS TO
Physical Activity Posture Gravity direction, Posture...
...to cardiac injury
Endogenous opiates Molecular Probe Autonomic
Activity/Tone
Time of Day Clock/Date **Track** because activity
and risk vary during day or year
In one embodiment, electrical stimulation is...
...include minimizing or preventing acute infarct and reducing reperfusion arrhythmia. In one 5 embodiment, the **therapy** is delivered thirty minutes or more prior to the anticipated on-set of an insult such as ischemia. As much as possible, the above **therapies** should be implemented prior to the insult. Some of the many exemplary embodiments included 'thin...
...flowchart illustrating delivery of stimulation initiated because a patient anticipates physical activity and manually triggers **therapy** (block 520). This may be accomplished using an externally-positioned magnet as may be used

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DIALOG(R)File 349:PCT FULLTEXT
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01059331
IMPLANTABLE DRUG DELIVERY SYSTEM RESPONSIVE TO INTRA-CARDIAC PRESSURE
SYSTEME D'ADMINISTRATION DE MEDICAMENT IMPLANTABLE SENSIBLE A LA PRESSION INTRACARDIAQUE
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Patent and Priority Information (Country, Number, Date):
Patent: WO 200389033 A1 20031030 (WO 0389033)
Application: WO 2003US12249 20030417 (PCT/WO US0312249)
Priority Application: US 2002126538 20020422
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 11815
English Abstract
The invention is directed to techniques for **monitoring** the condition of a patient, such as a patient having **congestive heart failure**, and appropriately modifying the patient's drug therapy as a function of a pressure in the patient's heart, such as the estimated pulmonary artery diastolic pressure. The drugs may be administered by an implanted drug delivery device (12). The drug selection, the drug dosage or both may be controlled as a function of the pressure and/or the activity level of the patient.
International Patent Class: **A61B-005/00** ...
... **A61B-005/0205**
Fulltext Availability: Detailed Description
Detailed Description
... s condition between office visits are addressed. Further, by more directly measuring the symptoms of **cardiac decompensation** as reflected in the pressure value, the present invention more effectively **treats** the condition with drug **therapy** by increasing cardiac output. Also, the system and method of the present invention effectively...

20/3,AB,K/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00823305
INFORMATION REMOTE MONITOR (IRM) MEDICAL DEVICE
DISPOSITIF MEDICAL AVEC MONITEUR D'INFORMATIONS A DISTANCE (IRM)
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Patent: WO 200156467 A1 20010809 (WO 0156467)
Application: WO 2001US3589 20010202 (PCT/WO US0103589)
Priority Application: US 2000180285 20000204
Designated States: CA JP
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Publication Language: English
Filing Language: English
Fulltext Word Count: 5862
English Abstract

An information remote **monitor** (IRM) is implemented to collect medical device data locally in a patient's home for transmission to a remote location. Specifically, the IRM integrates data from an external pressure reference (EPR) and an implanted medical device (IMD), preferably the Chronicle(square), for remote transmission to a server or a clinical center for follow-up, monitoring and evaluation. The IRM utilizes wireless telemetry to downlink to the IMD and directly engages the EPR to download barometric pressure data to correct **cardiac pressure** readings from the Chronicle(square) or IMD. The IRM may be connected serially to a PC and the PC may control the functions of the IRM. In the alternate, the PC may be used to transfer data from the IRM, through a Web-enabled network system, to a server or a remote location. The IRM utilizes an integral modem to dial a server and transfer patient data via FTP, PPP and TC/PIP protocols. The IRM includes ergonomic shapes and features adapted for home use including a highly simplified and illustrative user interface that enables the patient to easily operate the device to successfully transfer medical data as needed.

Main International Patent Class: **A61B-005/00**
Fulltext Availability: Detailed Description
Detailed Description

... for correlation to atmospheric pressure. The Chronicle E is generally used in patients with chronic **CHF** , undergoing serial clinical management. It is generally used to complement existing **CHF** **therapies** and disease management regimens in order to provide precise **therapy** management, early intervention by remote **monitoring** of impending **decompensation** and to improve quality of life. In this regard, the use of 1 5 programmer...